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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/105,535 | 06/26/1998 | GEOFFREY R. BALL | BALL-08630 | 5691 |
| 72960 | 7590 | 03/18/2009 | EXAMINER | |
| Casimir Jones, S.C. | | | LACYK, JOHN P | |
| 440 Science Drive | | | ART UNIT | PAPER NUMBER |
| Suite 203 | | | | 3735 |
| Madison, WI 53711 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|--------------------------------------|------------------------------------|
| Office Action Summary | Application No. 09/105,535 | Applicant(s) BALL ET AL. |
| | Examiner John P. Lacyk | Art Unit 3735 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-24 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Form PTO-1449 (Rev. 01-07) 5/26/06
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date: _____
 5) Notice of Informal Patent Application
 6) Other: _____

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-6, 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Fredrickson (3,870,832).

Fredrickson discloses a device for assisting hearing in a person having a housing (17) coupled to a part of the ear of a person having a mass (12) coupled to the housing to vibrate in response to an externally generated electrical signal using a coil (14, 16).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredrickson.

Although Fredrickson does not specifically teach mounting the device on the particular part of the ear structure, to mount the device anywhere in the ear to perform the same

function is considered to have been a matter of engineering design choice and obvious to one skilled in the art.

Claims 1-3, 12-15, 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Hough et al (4,612,915).

Hough et al discloses a device for assisting hearing in a person having a housing (12) coupled to a part of the skull using a bone screw (80) to cause vibrations. The device includes a mass (82) coupled to the housing to vibrate in response to an externally generated electrical signal (13).

Claims 1, 4, 9, 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Issalene et al (5,447,489).

Issalene et al discloses a device for assisting hearing in a person having a housing or mouthpiece comprises a receiver part including a vibrating element (2) for vibrating the mouth and/or tooth of a person in response to an externally generated signal provided by the transmitter part (Figure 8, column 5, line 57-column 6, line 19).

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Issalene et al.

Issalene et al discloses the claimed invention except for the use of a magnet to vibrate the bone. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the piezoelectric element with a magnet since the

examiner takes Official Notice of the equivalence of magnets and piezoelectric elements for their use in vibrating the bones in the hearing aid art and the selection of any of these known equivalents to vibrate the bone to improve hearing would have been within the level of ordinary skill in the art.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5-11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-34 of U.S. Patent No. 5,456,654. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims both recite an apparatus for improving hearing that has a magnet and coil within a housing that vibrates in response to an electric signal to vibrate the structure of the ear.

Claims 1-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 5,913,815. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both recite an apparatus and method for improving hearing that has a magnet and coil within a housing that vibrates in response to an electric signal to vibrate the structure of the ear.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19 and 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the use of "couplable" is indefinite in that it is unclear whether the housing is actually coupled or not; also a positive connection to the body is improper, language such as "adapted to be coupled" should be used. Further "adapted to" language should be used in claims 2,5,7,12,13,15,23. Claims 2, 4 are confusing in that claim 1 already has the housing coupled to the structure of the ear, it is unclear how it can also be part of the skull or a mouthpiece. Claims 11, 19 claim the device in terms of an unclaimed element, i.e. the signal, either the signal must be a positively claimed element or the device can not be claimed in terms of the signal. Claim 15 is indefinite in that it is unclear whether the housing is mounted to a bone in the skull or the middle ear. Claim 16 is unclear how the device can be incorporated into a mouthpiece when claim 12

already defines that it is coupled to the skull. Claims 21-22 should be recited in an active state, i.e. attaching the housing. Claim 22 is confusing whether the housing is attached to the skull or the middle ear.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Lacyk whose telephone number is (571)272-4728. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chuck Marmor, II can be reached on 571-272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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J.P. Lacyk

/John P Lacyk/
Primary Examiner, Art Unit 3735